

BOYDELL'S FIRE-PROOF CONSTRUCTION.

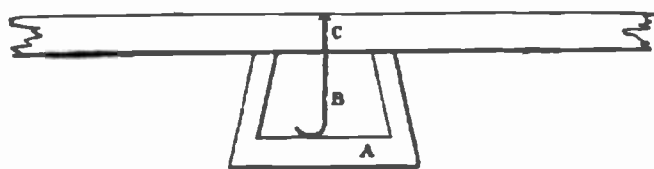


FIG. 1.

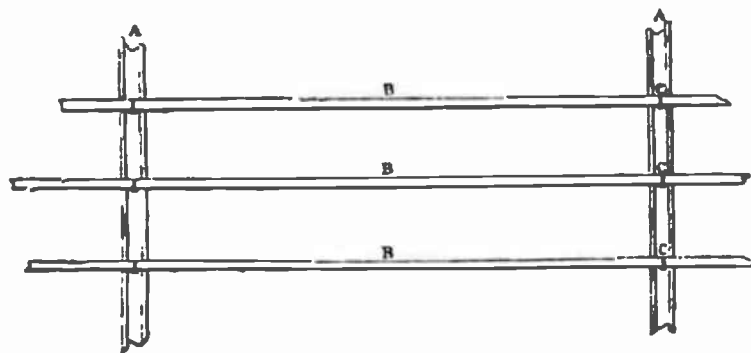


FIG. 2.

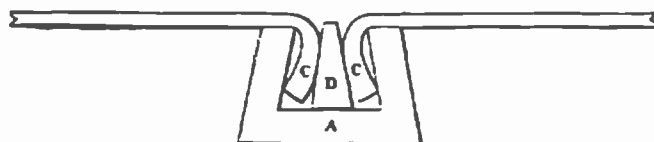


FIG. 3.

FIRE PROOF HOUSES.

BOYDELL'S WROUGHT-IRON SUBSTITUTE FOR WOODWORK IN ROOFS AND CEILINGS.

EVERY scientific endeavour to render dwelling-houses fire-proof has our best wishes, and ought to receive full consideration on the part of the public. We saw last week two houses in Gloucester-crescent, Regent's-park-terrace, which are being built with this end in view by Mr. J. Boydell, who took out a patent for rolled wrought iron for roofs and floors several years ago, but has only just now attempted to bring his system into use.

The same principle applies to both joists and rafters. They are bars of wrought iron, grooved from end to end, the bottom of the groove being slightly wider than the top. This groove may be filled with wood, into which the nails fastening the floor-boards are driven, without the wood being liable to be drawn out of the groove. At the same time, the points of the nails are turned by the iron bottom of the groove and clinched—See Fig. 1—which shows a transverse section of (A) the joist, the groove (B) being filled with wood to receive the nails of the floor-boards (C).

In Fig. 2, A, A represent the grooved rafters, into which the bent ends of the angle irons (B, B) are fixed at C by iron wedges—as shown by the transverse section,—

Fig. 3. — A being the rafter and D the wedge which fastens together in the groove the two ends of the angle irons (C, C). The angle irons, or battens, may thus be placed at any distance from one another, according to the gauge to which the slates will work.

Light framed girders carry the joists: the ceilings are formed of plain-tiles to receive the plaster: the hearths for the fire-places are of iron, so are the lintels over the door and window openings, and throughout the carcass of the house there is no timber of any kind.

The construction is very light, and, according to the patentee, does not increase the expense of an ordinary dwelling-house.

Some precise experiments on the strength of floors thus formed would tend to give confidence to the public.

INDENTED GLASS FOR CHURCH WINDOWS.

A DESCRIPTION of glass, termed "quarry" glass, has been recently manufactured by Messrs. Hartley and Company for church, chapel, and school windows. For these windows, as our readers know, small pieces of glass are generally used, fastened together with lead, which, from the amount of labour required, are costly, and when finished are constantly liable to get out of repair: the wind and rain are soon found to penetrate the joints, and often render adjoining sittings exceedingly uncomfortable. The glass we refer to is thick, of large size, untransparent, and marked by indentations into the shape of quarries. We counsel the makers against attempting to put it off as an imitation of lead lights: let it be put forward as what it really is. Large plain surfaces of glass do not accord with the character of Gothic architecture, and hence adherence to a rude kind of glazing. The indented glass may, for aught we know (we have not yet seen it), enable architects to dispense with quarries, and make their windows air tight. The new glass being strong, no frame would be required: it would be secured at once to the stonework.

DRAINS TO THE COMMON SEWERS.

Where a landlord gives permission to a party to run a drain into his, it is held that the party, having once given that permission, cannot afterwards close up the drain, and is bound to keep it clear at his own expense, although the stoppage of the drain arises from the drain he permitted to run into his.

In the case of Ward v. Warner, at the Lambeth County Court, before Mr. Chilton, the plaintiff said he sought to recover 2l. 7s. 9d., a moiety of expenses incurred in repairing a drain on his premises. Last year the authorities ordered the defendant to make a drain from his cesspool, and the plaintiff, to oblige the defendant, who was a neighbour, consented for him to run the drain into his. The defendant's drain was, however, so badly constructed, that in a short time the Commissioners of Sewers ordered it to be redone. As the evil arose from the plaintiff's drain, he thought it but fair that

he should bear half the expense he had incurred. Defendant said he was not liable, as the obstruction did not occur on his side. The Judge said the plaintiff had given an uninterrupted access to his drain, and had made an improvident agreement; and he was bound to keep it in order.

Mr. Ward.—But I did not agree for ever, and I shall at once remove it.

The Judge.—Then you do so at your peril. I think you had better come to terms. I must give a verdict for defendant.

Mr. Ward.—It is too bad; and if that is the law, the sooner landlords and builders are acquainted with it the better, especially as the Commissioners of Sewers are every day ordering alterations and new drains. But I will have it stopped, for I will apply to the Commissioners of Sewers upon the subject.

RATING WATERWORKS.

REGINA v. THE EAST LONDON WATERWORKS.

In the Queen's Bench.

THE East London Waterworks Company had been rated by the trustees for lighting, paving, and improving the hamlet of Mile-end Old-town in respect of their mains and pipes passing through the hamlet. The company appealed against the rate, which was confirmed on appeal, subject to the opinion of this Court upon a case stated. By the local Act, the rate is to be laid on all persons who occupy or enjoy "any messuages, tenements, coachhouses, &c., or other buildings, tenements, or hereditaments," situate within the hamlet.

Council having been heard,

Lord Campbell said, the question in this case was, whether the East London Waterworks Company were liable to be rated to the local rate under the particular terms employed in the Act of Parliament in respect of their mains and pipes which were fixed in the ground. There could be no doubt that they were the occupiers of tenements for certain purposes, so as, for instance, to become liable to the poor-rate under the 43rd Elizabeth; but in the local Act, there was specific mention of the things which were to be rated, and among these were messuages, coachhouses, stables, &c., which gave the sense which was to be applied to the words "tenements and hereditaments." These words must, therefore, be construed as limited to tenements and hereditaments of the kind specifically mentioned in the Act; and this was the rule of construction which had been adopted by the court in the case of the Manchester and Salford Waterworks. The decision of the Court, therefore, was to reverse what had been done by the sessions, and to quash the rate.

IRISH BUILDING AND RAILWAY WORKS.

A NEW Presbyterian Church is to be erected at Belfast, and the subscriptions for defraying the expenses are increasing.

The Board of Guardians of the Youghal Union have decided upon the erection of a new workhouse, and tenders are being received for the same, in conformity with the drawings, &c. furnished by the architect to the Poor-law Commissioners.

New station-houses are to be erected at Clonmel and Cahin, on the Waterford and Limerick Railway, in accordance with the plans prepared by the architects, Messrs. Murray and Denny, of Dublin. The ground surveys and setting out of the line are being proceeded with, on the new deviation; and the land through which the railway is to run at Piltown, has been given up to the company. The works on this portion will be commenced immediately.

The works at the new R. C. Church of St. Mary, at Irishtown, county Dublin, are progressing: the walls of the north and south aisles, and sacristies have been raised to their full height. Those of the east and west ends are built to the commencement of the gables. The interior columns and arches, which are to divide the church into nave and aisles, and other portions, are still wanting.

The Killarney Junction Railway works have been at last resumed: when all preliminary arrangements are made, 3,000 men will be engaged on the line.